

MORTON et al. – Appln. No. 10/806,464

OK TO ENTER: /C.K./

OK TO ENTER: /C.K./

IN THE CLAIMS:

1. (Previously Presented) A fuel injector having a housing including an inlet, an outlet, and a passageway for fuel flow from the inlet to the outlet, the fuel injector comprising:

a coil assembly disposed proximate the inlet of the fuel injector;

a seat disposed proximate the outlet of the fuel injector; and

a closure member disposed in the housing and operable by the coil assembly to permit and prohibit fuel flow through the seat, the closure member including:

a sleeve extending along a longitudinal axis and having first and second ends, the sleeve including a recess and having an outer surface a first distance from the longitudinal axis; and

an armature coupled to the first end of the sleeve so that the sleeve is movable with the armature, the armature having a first portion disposed in the recess of the sleeve and a second portion extending outwardly from the first end of the sleeve, the second portion having an outer perimeter a second distance from the longitudinal axis, the second distance not greater than the first distance.

2. (Previously Presented) The fuel injector according to claim 1, wherein the coil assembly comprises an inner surface, the outer perimeter of the second portion of the armature and the inner surface of the coil assembly defining a working gap less than 100 microns.

3. (Original) The fuel injector according to claim 1, further comprising a sealing member coupled to the second end of the sleeve.

4. (Original) The fuel injector according to claim 1, wherein the sealing member comprises a spherical shaped member to engage the seat.

5. (Previously Presented) The fuel injector according to claim 4, wherein the spherical shaped member comprises a ball.

MORTON et al. – Appln. No. 10/806,464

6. (Original) The fuel injector according to claim 1, wherein at least one of the outer surface of the sleeve and the outer perimeter of the armature is circular.

7. (Canceled)

8. (Original) The fuel injector according to claim 1, wherein the armature includes a stop portion, the stop portion defining the outer perimeter and contacting at least a portion of the first end of the sleeve.

9. (Original) The fuel injector according to claim 1, wherein each of the sleeve and the armature includes at least one flow hole therethrough, the flow holes defining a fuel passage from the inlet to the outlet of the fuel injector.

10. (Original) The fuel injector according to claim 9, wherein the at least one flow hole in the armature comprises an oval shape.

11. (Original) The fuel injector according to claim 10, wherein the at least one flow hole in the sleeve is disposed on the second end of the sleeve.

12. (Original) The fuel injector according to claim 10, wherein the at least one flow hole in the sleeve is disposed on a transition portion between the first and second ends.

13. (Original) The fuel injector according to claim 3, wherein at least one of the armature and the sealing member are coupled to the sleeve by a tack weld.

14. (Original) The fuel injector according to claim 3, wherein at least one of the armature and the sealing member are coupled to the sleeve by a seam weld.

MORTON et al. – Appln. No. 10/806,464

15. (Previously Presented) The fuel injector according to claim 1, wherein the sleeve comprises at least one of a stamped member or thin-walled drawn member.

16. – 30. (Canceled)